

### **REMARKS**

Claims 1-4 and 6-15 are pending. Claim 5 was cancelled without prejudice to or disclaimer of the underlying subject matter in an amendment filed June 9, 2004. No amendments are presented in the present response.

The specification has been amended as presented in an Amendment After Final Rejection filed on November 10, 2004. Applicants note that these amendments were previously entered for purposes of appeal, *see*, Advisory Action dated December 7, 2004.

#### **1. Request for Continued Examination**

The instant application was appealed to the Board of Patent Appeals and Interferences ("Board") on December 1, 2004. An appeal brief was filed on February 1, 2005. Applicants file herewith a Request for Continued Examination under 37 C.F.R. § 1.114.

#### **2. Claim Rejections – 35 U.S.C. § 101**

Claims 1-4 and 6-15 stand rejected under 35 U.S.C. § 101, because the claimed invention allegedly lacks patentable utility. Final Action at page 2. Applicants respectfully traverse this rejection.

The specification provides a specific, substantial, and credible utility for SEQ ID NO: 2 and complements thereof. For example, the specification clearly asserts that the nucleic acid molecules of the present invention encode 60S Ribosomal Protein L10 proteins or fragments thereof. *See, e.g.*, specification at page 9, lines 15-17, and page 68

(Table 1). The skilled artisan would have understood the role of a 60S Ribosomal Protein L10 in protein synthesis. In addition, the specification also discloses that the nucleic acid molecules can be used to detect the level or pattern of a 60S Ribosomal Protein L10, for example in a cell. *See, e.g.*, specification at page 52, line 24 through page 53, line 10 and Table 1. One of ordinary skill in the art would recognize that the claimed nucleic acid molecules have utility, for example, to identify markers and isolate promoters associated with the 60S Ribosomal Protein L10 upon reading the present specification. These utilities are immediately apparent for the claimed nucleic acid molecules without further research.

The “basic quid pro quo contemplated by the Constitution and the Congress for granting a patent monopoly is the benefit derived by the public from an invention with substantial utility...where specific benefit exists in currently available form.” *Brenner v. Manson*, 383 U.S. 519, 534-35, 148 U.S.P.Q. 689, 695 (1966). Applicants have met this part of the bargain – the present specification discloses nucleic acid molecules which, in their current form, provide at least one specific benefit to the public, for example, use to encode a 60S Ribosomal Protein L10. *See, e.g.* Specification at page 9, lines 15-17, and page 68 (Table 1). This benefit is specific, not vague or unknown, and it is a “real world” or substantial benefit.

The “threshold for utility is not high: An invention is ‘useful’ under section 101 if it is capable of providing some identifiable benefit.” *Juicy Whip, Inc. v. Orange Bang, Inc.*, 185 F.3d 1364, 1366, 51 U.S.P.Q.2d 1700, 1702 (Fed. Cir. 1999), *citing Brenner v. Manson*, 383 U.S. 519, 534 (1966). Furthermore, an invention need only provide one identifiable benefit to satisfy 35 U.S.C. § 101. *See Raytheon Co. v. Roper Corp.*, 724

F.2d 951, 958, 220 U.S.P.Q. 592, 598 (Fed. Cir. 1983) (“when a properly claimed invention meets at least one stated objective, utility under section 101 is clearly shown”).

The Federal Circuit has recently provided guidance as to the kind of disclosure an application could contain to establish a specific and substantial utility. *In re Fisher*, 421 F.3d 1365, 76 U.S.P.Q.2d 1225 (Fed. Cir, 2005). First, the Court indicated that the specification disclose “that an invention is useful to the public as disclosed in its current form.” *Id.* at 1371. Second, the Court further noted that the specification “also show that that claimed invention can be used to provide a well-defined and particular benefit.” *Id.* Applicants have provided nucleic acid sequences which are shown in the specification to correlate to known genes. Such a correlation is sufficient to satisfy the utility standard. *Id.*

The present specification discloses specific and substantial uses for the claimed nucleic acid molecules, including use to encode a 60S Ribosomal Protein L10 or fragment thereof (*see, e.g.*, specification at page 9, lines 15-17, and page 68 (Table 1) and the sequence listing); use to identify polymorphisms related to 60S Ribosomal Protein L10 (*see, e.g.*, specification at page 53, line 27 through page 59, line 33); use to transform plants to modify the expression of 60S Ribosomal Protein L10 (*see, e.g.*, specification at page 18, line 25 through page 30, line 12); and to determine the level or pattern of expression of the 60S Ribosomal Protein L10 protein or mRNA associated with that 60S Ribosomal Protein L10 nucleic acid molecule (*see, e.g.*, specification at page 52, line 24 through page 53, line 10).

One of ordinary skill in the art would recognize that the claimed nucleic acid molecules have utility, for example, to encode a 60S Ribosomal Protein L10 protein upon

reading the present specification. These utilities are immediately apparent for the claimed nucleic acid molecules without further research.

An examiner must accept a utility by an applicant unless the Office has evidence or sound scientific reasoning to rebut the assertion. *See In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992). “More specifically, when a patent application claiming a nucleic acid asserts a specific, substantial, and credible utility, and bases the assertion upon homology to existing nucleic acids or proteins having an accepted utility, the asserted utility must be accepted by the examiner unless the Office has sufficient evidence or sound scientific reasoning to rebut such as assertion.” Federal Register 66(4):1096, Utility Guidelines (2001). “[A] ‘rigorous correlation’ need not be shown in order to establish practical utility; ‘reasonable correlation’ is sufficient.” *See, Fujikawa v. Wattanasin*, 93 F.3d 1559, 1565, 39 U.S.P.Q.2d 1895, 1900 (Fed. Cir. 1996). “An Applicant can establish this reasonable correlation by relying on statistically relevant data documenting the activity of the compound or composition, arguments or reasoning, documentary evidence, or any combination thereof.” M.P.E.P. § 2107.03, at page 2100-43. Applicants have demonstrated such a reasonable correlation.

The claimed nucleic acid molecules have been asserted to encode a 60S Ribosomal Protein L10 protein or fragment thereof. The specification provides ample correlation between the claimed nucleic acid molecules and the recited protein. Accordingly, the assertion of the use of the claimed nucleic acid molecules to encode the recited protein or fragment thereof satisfies the utility requirement of 35 U.S.C. § 101.

Applicants have disclosed a specific, substantial and credible utility for the claimed nucleic acid molecules. Any one of these utilities is enough to satisfy the

requirements of 35 U.S.C. § 101. Because Applicants need only establish a single utility to satisfy 35 U.S.C. § 101, and have done so in the present case, the rejection under Section 101 is incorrect. Reconsideration and withdrawal of this rejection are respectfully requested.

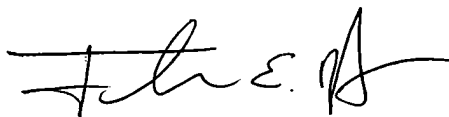
**3. Claim Rejections – 35 U.S.C. § 112, first paragraph, enablement**

Claims 1-4 and 6-15 were rejected under 35 U.S.C. § 112, first paragraph, as not being enabled by the specification, because the claimed invention allegedly lacks utility (*i.e.*, an invention with no utility cannot be enabled). Applicants respectfully traverse this rejection and note that this rejection has been overcome by the foregoing arguments regarding utility. Thus, the specification teaches a person of ordinary skill to make and use the claimed transformed plants and methods. Accordingly, the enablement rejection under 35 U.S.C. § 112, first paragraph, is improper. Reconsideration and withdrawal are respectfully requested.

### Conclusion

In view of the foregoing remarks, Applicants respectfully submit that the present application is now in condition for allowance, and notice of such is respectfully requested. The Examiner is encouraged to contact the undersigned at (202) 942-5000 should any additional information be necessary for allowance.

Respectfully submitted,



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